

in which:

$R_1$  is a CN or methyl or a halogen atom;

$R_2$  is  $S(O)_nR_3$  or 4,5-dicyanoimidazol-2-yl or haloalkyl;

$R_3$  is alkyl or haloalkyl;

$R_4$  represents a hydrogen or halogen atom; or a radical  $NR_5R_6$ ,  $S(O)_mR_7$ ,  $C(O)R_7$  or  $C(O)OR_7$ , alkyl, haloalkyl or  $OR_8$  or a radical  $N=C(R_9)(R_{10})$ ;

$R_5$  and  $R_6$  independently represent a hydrogen atom or an alkyl, haloalkyl,  $C(O)$ alkyl or  $S(O)_rCF_3$  radical; or  $R_5$  and  $R_6$  may together form a divalent alkylene radical which may be interrupted with one or two divalent hetero atoms[, such as] selected from the group consisting of oxygen [or] and sulphur;

$R_7$  represents an alkyl or haloalkyl radical;

$R_8$  represents an alkyl or haloalkyl radical or a hydrogen atom;

$R_9$  represents an alkyl radical or a hydrogen atom;

$R_{10}$  represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or [groups such as] moieties selected from the group consisting of OH, -O-alkyl, -S-alkyl, cyano [or] and alkyl;

$R_{11}$  and  $R_{12}$  represent, independently of each other, a hydrogen, [or] halogen atom, CN or  $NO_2$ ;

$R_{13}$  represents a halogen atom or a haloalkyl, haloalkoxy,  $S(O)_qCF_3$  or  $SF_5$  group;

m, n, q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical  $C-R_{12}$ , the other three valencies of the carbon atom forming part of the aromatic ring;

with the proviso that, when  $R_1$  is methyl, either  $R_3$  is haloalkyl,  $R_4$  is  $NH_2$ ,  $R_{11}$  is Cl,  $R_{13}$  is  $CF_3$  and X is N; or  $R_2$  is 4,5-dicyanoimidazol-2-yl,  $R_4$  is Cl,  $R_{11}$  is [CL] CL,  $R_{13}$  is  $CF_3$ , and X is C-Cl.

Claims 2-20, line 1 of each, please change "Collar" to --The collar--.

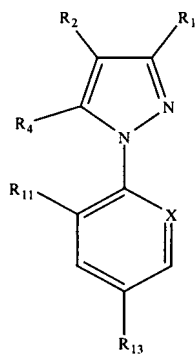
Claim 11, line 2, please delete "chosen among the group consisting of"

Claim 11, lines 5-6, please delete "with  $n=0$  and  $R_3$  is  $CF_3$ , and  $n=1$  and  $R_3$  is ethyl."

Claims 12 to 17, line 2 of each, after "%" please insert --by weight-- and please change "substance" to --agent--.

Claim 18, line 2, please delete "or external device"

21. (Twice Amended) [Method] A method for eliminating fleas and ticks from a pet[s] to ensure more than six months of efficacy of greater than 95% against fleas, as determined in a test providing the reinfestation of the pet with  $100 \pm 10$  fleas, and more than three months of efficacy of greater than 90% against ticks, as determined in a test providing the reinfestation of the pet with  $50 \pm 3$  ticks, comprising attaching to the pet[s] a collar [at least one external device] having a matrix into which is incorporated [a] from 0.1 to 40% by weight, relative to the collar, of an active agent against fleas and ticks, this active agent comprising at least one compound corresponding to formula I below



in which:

$R_1$  is a CN or methyl or a halogen atom;

$R_2$  is  $S(O)_n R_3$  or 4,5-dicyanoimidazol-2-yl or haloalkyl;

R<sub>3</sub> is alkyl or haloalkyl;

R<sub>4</sub> represents a hydrogen or halogen atom; or a radical NR<sub>5</sub>R<sub>6</sub>, S(O)<sub>m</sub>R<sub>7</sub>, C(O)R<sub>7</sub> or C(O)OR<sub>7</sub>, alkyl, haloalkyl or OR<sub>8</sub> or a radical N=C(R<sub>9</sub>)(R<sub>10</sub>);

R<sub>5</sub> and R<sub>6</sub> independently represent a hydrogen atom or an alkyl, haloalkyl, C(O)alkyl or S(O)<sub>r</sub>CF<sub>3</sub> radical; or R<sub>5</sub> and R<sub>6</sub> may together form a divalent alkylene radical which may be interrupted with one or two divalent hetero atoms[, such as] selected from the group consisting of oxygen [or] and sulphur;

R<sub>7</sub> represents an alkyl or haloalkyl radical;

R<sub>8</sub> represents an alkyl or haloalkyl radical or a hydrogen atom;

R<sub>9</sub> represents an alkyl radical or a hydrogen atom;

R<sub>10</sub> represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or [groups such as] moieties selected from the group consisting of OH, -O-alkyl, -S-alkyl, cyano [or] and alkyl;

R<sub>11</sub> and R<sub>12</sub> represent, independently of each other, a hydrogen, [or] halogen atom, CN or NO<sub>2</sub>;

R<sub>13</sub> represents a halogen atom or a haloalkyl, haloalkoxy, S(O)<sub>q</sub>CF<sub>3</sub> or SF<sub>5</sub> group;

m, n, q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical C-R<sub>12</sub>, the other three valencies of the carbon atom forming part of the aromatic ring;

with the proviso that, when R<sub>1</sub> is methyl, either R<sub>3</sub> is haloalkyl, R<sub>4</sub> is NH<sub>2</sub>, R<sub>11</sub> is Cl, R<sub>13</sub> is CF<sub>3</sub> and X is N; or R<sub>2</sub> is 4,5-dicyanoimidazol-2-yl, R<sub>4</sub> is Cl, R<sub>11</sub> is [CL] CL, R<sub>13</sub> is CF<sub>3</sub>, and X is C-Cl.

Claims 22-38, and 40-47, line 1 of each, please change "Method" to --The method--.

Claim 11, lines 2-3, please delete "chosen among the group consisting of"

Claim 11, lines 5-6, please delete "with n=0 and R<sub>3</sub> is CF<sub>3</sub>, and n=1 and R<sub>3</sub> is ethyl."

Claim 43, lines 102, please delete "long-lasting".

Claim 48, line 1, please change "Anti-flea and anti-tick device" to --The collar--.; and

"device" to --collar--.

Claims 50-52, line 1 of each, please change "Method" to --The method--; and "49" to --53--.

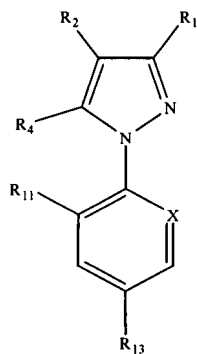
Claim 50, line 1, claim 51, line 2, and claim 52, line 2, please change "external device" to --collar--.

Kindly cancel claim 49, without prejudice, admission, surrender of subject matter, or any intention of creating any estoppel as to equivalents.

Please add the following new claims:

--53. The method of claim 21 wherein the pet is a cat or dog.

54. A method for distributing an active agent over a pet's body and/or in sebaceous glands of the pet and thereby control fleas and ticks on or eliminate fleas and ticks from the pet to ensure more than six months of efficacy of greater than 95% against fleas, as determined in a test providing the reinfestation of the pet with  $100 \pm 10$  fleas, and more than three months of efficacy of greater than 90% against ticks, as determined in a test providing the reinfestation of the pet with  $50 \pm 3$  ticks, comprising attaching to the pet a collar having a matrix into which is incorporated from 0.1 to 40% by weight, relative to the collar, of the active agent against fleas and ticks, this active agent comprising at least one compound corresponding to formula I below



in which:

$R_1$  is a CN or methyl or a halogen atom;

$R_2$  is  $S(O)_nR_3$  or 4,5-dicyanoimidazol-2-yl or haloalkyl;

$R_3$  is alkyl or haloalkyl;

$R_4$  represents a hydrogen or halogen atom; or a radical  $NR_5R_6$ ,  $S(O)_mR_7$ ,  $C(O)R_7$  or  $C(O)OR_7$ , alkyl, haloalkyl or  $OR_8$  or a radical  $N=C(R_9)(R_{10})$ ;

$R_5$  and  $R_6$  independently represent a hydrogen atom or an alkyl, haloalkyl,  $C(O)$ alkyl or  $S(O)_rCF_3$  radical; or  $R_5$  and  $R_6$  may together form a divalent alkylene radical which may be interrupted with one or two divalent hetero atoms selected from the group consisting of oxygen and sulphur;

$R_7$  represents an alkyl or haloalkyl radical;

$R_8$  represents an alkyl or haloalkyl radical or a hydrogen atom;

$R_9$  represents an alkyl radical or a hydrogen atom;

$R_{10}$  represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or moieties selected from the group consisting of OH, -O-alkyl, -S-alkyl, cyano and alkyl;

$R_{11}$  and  $R_{12}$  represent, independently of each other, a hydrogen, halogen atom, CN or  $NO_2$ ;

$R_{13}$  represents a halogen atom or a haloalkyl, haloalkoxy,  $S(O)_qCF_3$  or  $SF_5$  group;

m, n, q and r represent, independently of each other, an integer equal to 0, 1 or 2;

X represents a trivalent nitrogen atom or a radical C- $R_{12}$ , the other three valencies of the carbon atom forming part of the aromatic ring;

with the proviso that, when  $R_1$  is methyl, either  $R_3$  is haloalkyl,  $R_4$  is  $NH_2$ ,  $R_{11}$  is Cl,  $R_{13}$  is  $CF_3$  and X is N; or  $R_2$  is 4,5-dicyanoimidazol-2-yl,  $R_4$  is Cl,  $R_{11}$  is Cl,  $R_{13}$  is  $CF_3$ , and X is C-Cl.

55. The method of claim 54, wherein the compound of formula (I) is such that:

$R_1$  is CN or methyl;

$R_2$  is  $S(O)_nR_3$ ;

$R_3$  is alkyl or haloalkyl;

$R_4$  represents a hydrogen or halogen atom; or a radical  $NR_5R_6$ ,  $S(O)_mR_7$ ,  $C(O)R_7$  or  $C(O)OR_7$ , alkyl, haloalkyl or  $OR_8$  or a radical  $N=C(R_9)(R_{10})$ ;

$R_5$  and  $R_6$  independently represent a hydrogen atom or an alkyl, haloalkyl,  $C(O)$ alkyl or  $S(O)_rCF_3$  radical; where  $R_5$  and  $R_6$  may together form a divalent alkylene radical which may be interrupted with one or two divalent hetero atoms selected from the group consisting of oxygen and sulphur;

$R_7$  represents an alkyl or haloalkyl radical;

$R_8$  represents an alkyl or haloalkyl radical or a hydrogen atom;

$R_9$  represents an alkyl radical or a hydrogen atom;

$R_{10}$  represents a phenyl or heteroaryl group optionally substituted with one or more halogen atoms or moieties selected from the group consisting of OH, -O-alkyl, -S-alkyl, cyano and alkyl;

$R_{11}$  and  $R_{12}$  represent, independently of each other, a hydrogen, or halogen atom;

$R_{13}$  represents a halogen atom or a haloalkyl, haloalkoxy,  $S(O)_qCF_3$  or  $SF_5$  group;

$m$ ,  $n$ ,  $q$  and  $r$  represent, independently of each other, an integer equal to 0, 1 or 2;

$X$  represents a trivalent nitrogen atom or a radical  $C-R_{12}$ , the other three valencies of the carbon atom forming part of the aromatic ring;

with the proviso that, when  $R_1$  is methyl, then  $R_3$  is haloalkyl,  $R_4$  is  $NH_2$ ,  $R_{11}$  is Cl,  $R_{13}$  is  $CF_3$  and  $X$  is N.

56. The method of claim 55 wherein in the compound  $R_1$  is CN.

57. The method of claim 55 wherein in the compound  $R_{13}$  is haloalkyl.

58. The method of claim 55 wherein in the compound  $R_{13}$  is  $CF_3$ .

57. The method of claim 55 wherein in the compound  $R_2$  is  $S(O)_nR_3$ .

58. The method of claim 57 wherein in the compound  $n=1$  and  $R_3$  is methyl, ethyl or

CF<sub>3</sub>.

59. The method of claim 57 wherein in the compound  $n=0$  and R<sub>3</sub> is CF<sub>3</sub>.
60. The method of claim 55 wherein in the compound X is C-R<sub>12</sub> and is a halogen atom.
61. The method of claim 55 wherein in the compound R<sub>1</sub> is CN, and/or R<sub>3</sub> is haloalkyl, and/or R<sub>4</sub> is NH<sub>2</sub>, and/or R<sub>11</sub> and R<sub>12</sub> are, independently of each other, a halogen atom, and/or R<sub>13</sub> is haloalkyl.
62. The method of claim 55 wherein the compound is 1-[2,6-Cl<sub>2</sub> 4-CF<sub>3</sub> phenyl] 3-CN 4-[SO-CF<sub>3</sub>] 5-NH<sub>2</sub> pyrazole, and whose common name is Fipronil.
63. The method of claim 55 wherein the active agent is present in an amount of from 1 to 15% by weight.
64. The method of claim 63 wherein the active agent is present in an amount of from 1.25 to 10% by weight.
65. The method of claim 64 wherein the active agent is present in an amount of from 2 to 6% by weight.
66. The method of claim 65 wherein the active agent is present in an amount of from 2.5 to 5% by weight.
65. The method of claim 64 wherein the active agent is present in an amount of from 1.25 to 10% by weight.
66. The method of claim 62 wherein the active agent is present in an amount of from 1 to 15% by weight.
67. The method of claim 66 wherein the active agent is present in an amount of from 1.25 to 10% by weight.
68. The method of claim 67 wherein the active agent is present in an amount of from 2 to 6% by weight.
69. The method of claim 68 wherein the active agent is present in an amount of from 2.5 to 5% by weight.